

The Development of Liberal Arts and Sciences

11 12

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Technological Singularity

[2]

[illegible][illegible]

Leukotomy [3]

In Math We Trust—Technological Singularity—AlphaGo Zero —superhuman ———“———
———”——— [4]———

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[REDACTED]
[REDACTED] [7]

[illegible]

[8]

Ibn al-Haytham

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1516 well-controlled (Filippo Brunelleschi)

[9] [10]

[illegible]

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17

[illegible]

peer review

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metaphysics
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19 19

[illegible][illegible]

1819 Ferdinand Karl Schweikart 1830

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[18] [https://www.fishbase.org/species/0679](#)

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Page 20

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[21] [22]

[illegible]

[illegible]

[23]

[illegible][illegible]

[REDACTED] [26] [REDACTED]
[REDACTED]

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leukotomy

Universal approximation theorem

Technological Singularity

1. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games.

2. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games.

3. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. Wind Tunnel approach is a method for testing the aerodynamic properties of an aircraft.

4. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games.

5. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. 737Max is a commercial jet airplane.

6. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. SAE level 5 is a level of automation. SAE level 4 is a level of automation. SAE level 4 is a level of automation.

7. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. Deep Blue is a computer program that can play the board game chess. Demis Hassabis is a British scientist and entrepreneur. Nature is a scientific journal. Superhuman is a term used to describe a person or machine that is capable of performing tasks beyond the capabilities of a human. generic is a term used to describe a person or machine that is capable of performing tasks beyond the capabilities of a human. human is a term used to describe a person or machine that is capable of performing tasks beyond the capabilities of a human.

8. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. 19x19 is a board game. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games.

9. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. Deep Blue is a computer program that can play the board game chess. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games.

10. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. Deep Blue is a computer program that can play the board game chess. Nature is a scientific journal. Superhuman is a term used to describe a person or machine that is capable of performing tasks beyond the capabilities of a human. generic is a term used to describe a person or machine that is capable of performing tasks beyond the capabilities of a human. human is a term used to describe a person or machine that is capable of performing tasks beyond the capabilities of a human.

11. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games.

12. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. Occam's Razor is a principle of philosophy.

13. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games. Occam's Razor is a principle of philosophy. Occam's Razor is a principle of philosophy. Occam's Razor is a principle of philosophy.

14. The Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human. AlphaGo Zero is a program that can play the board game Go at a superhuman level. It was trained on a dataset of Go games.

[illegible]

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[REDACTED]

[REDACTED] [30]

[illegible][illegible][illegible][illegible]

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[illegible]

スマートフォンが普及するにつれて、

スマートフォンの利用が、従来の携帯電話よりも多くなると見込まれる。

スマートフォンの普及に伴って、[34]スマートフォンが、従来の携帯電話よりも多くなると見込まれる。[35]

スマートフォンの普及に伴って、[36]

スマートフォンの普及に伴って、

スマートフォンの普及に伴って、70%のスマートフォンが、10%のスマートフォンが、従来の携帯電話よりも多くなると見込まれる。

スマートフォンの普及に伴って、

スマートフォンの普及に伴って、[37]

スマートフォンの普及に伴って、

スマートフォンの普及に伴って、

スマートフォン

80~90 歳のスマートフォンユーザーは、PCユーザー [38] Internet smartphone ユーザーよりも少ないと見込まれる。

iPhone スマートフォン smartphone mainframe PC ユーザーよりも少ないと見込まれる。smartphone ユーザーよりも少ないと見込まれる。

スマートフォン CPU operating system (OS) ユーザーよりも少ないと見込まれる。PC Internet smartphone ユーザーよりも少ないと見込まれる。

ARM CPU ユーザーよりも少ない Linux Android ユーザーよりも少ない CPU OS ユーザーよりも少ない [39] ユーザーよりも少ないと見込まれる。

consolidation スマートフォン Consolidation スマートフォン ユーザーよりも少ないと見込まれる。

スマートフォン ユーザーよりも少ないと見込まれる。

Gilded Age A City upon a Hill Forrest
Gump 911

[illegible][illegible][illegible][illegible]

witch-hunt

[illegible][illegible]

「personality」の次元は「dimension」で表わすことができる [45]

[46] のように

「人格」の次元は「dimension」で表わすことができる

[47] のように「人格」の次元は「dimension」で表わすことができる [49] のように

「人格」の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる 1/5 の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる [51]

「人格」の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる

Technological Singularity の次元は「dimension」で表わすことができる
Technological Singularity の AlphaGo Zero の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる

「人格」の次元は「dimension」で表わすことができる

[2] [\[1\]](#)

[3] 

[illegible][illegible]

[4] 中国象棋的棋盘是长方形的，由 9 条横线和 10 条竖线组成。棋盘上共有 90 个交叉点，其中左右两端各有 5 个“象眼”交叉点，中间 6 个交叉点为“将”或“帅”的位置。棋盘上共有 16 个棋子，其中红方有 7 个（将、帅、士、象、马、车、炮）和 9 个兵卒，黑方有 7 个（将、帅、士、象、马、车、炮）和 9 个兵卒。中国象棋的棋盘是长方形的，由 9 条横线和 10 条竖线组成。棋盘上共有 90 个交叉点，其中左右两端各有 5 个“象眼”交叉点，中间 6 个交叉点为“将”或“帅”的位置。棋盘上共有 16 个棋子，其中红方有 7 个（将、帅、士、象、马、车、炮）和 9 个兵卒，黑方有 7 个（将、帅、士、象、马、车、炮）和 9 个兵卒。

□□□□□□□□□□□□□□□□ In Math We Trust □□□□

Technological Singularity

[5] [REDACTED]
[REDACTED]
[REDACTED]

[illegible]

[6] [guideline](#) [judgement](#)

[illegible]

“ ”

[8] John Philoponus, *Commentary on Aristotle's Meteorology*, trans. D. G. Reardon, Loeb Classical Library, Harvard University Press, 1958.

Ibn al-Haytham

[9] [architect](#) [architect](#) [methodology](#)

[10] <https://doi.org/10.1016/j.jml.2019.04.001>

[illegible]

[11] personality

[illegible][illegible]

personality personality

physical sciences

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[12] ##### 1630
#####
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[illegible]

[13] [https://www.irs.gov/efile/efile-1041-essentials](#)

1687

[14]

[15] Gödel's theorems suggest metaphysics from humans may not work. I do not cross the boundary between religion and science.

Je pense, donc je suis

[illegible]

[16] [https://www.technologyinsights.com/insights/industry-trends/2022/01/2022-technology-trends-forecast/](#)

[illegible]

[17] Ferdinand Karl Schweikart

[18] □□□

[19] □□□□□□□□□□□□□□□□

[illegible][illegible]

[illegible][illegible][illegible][illegible]

[20] □□□

[21] [Filippo Marinetti - Manifesto del Futurismo](#)

Technological Singularity
Nature AlphaGo Zero superhuman

go rogue go
rogue

[illegible]

[22] <https://www.fishbase.org/species/100000> 1917 年 1 月 1 日 至 1917 年 12 月 31 日

[illegible]

□□(Паша)□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
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1917

1917

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Technological Singularity

[24] □□□□□□□□□□□□□□□□□□□□

[illegible][illegible][illegible]

leukotomy

BRAIN Initiative

[26]

ARBEIT MACHT FREI

[27] The Guardian a meta-solution to any problem AGI

"Demis Hassabis ... is deadly serious when he tells me he is on a mission to 'solve intelligence, and then use that to solve everything else'.

.....

'One way of thinking of AGI is as a process that will automatically convert unstructured information into actionable knowledge. What we're working on is potentially a meta-solution to any problem.'",

from <https://www.theguardian.com/technology/2016/feb/16/demis-hassabis-artificial-intelligence-deepmind-alphago>

[28] AlphaGo Zero AlphaGo Zero AlphaGo Zero AlphaGo Master AlphaGo Zero AlphaGo Master

AlphaGo Master

737 Max

"'In thousands of tests, nothing like this had ever happened,' he said.", Boeing Built Deadly Assumptions Into 737 Max, Blind to a Late Design Change, <https://www.nytimes.com/2019/06/01/business/boeing-737-max-crash.html>.

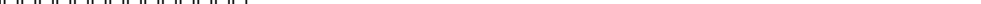
[29] Deep Blue

[30]

[illegible][illegible][illegible]

[31] The Selfish Gene (or The Immortal Gene) [1976]: to be "a leader to the Greeks and a despot to the barbarians, to look after the former as after friends and relatives, and to deal with the latter as with beasts or plants"

[32] □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

[33] 

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go rogue  vandalist 
1204 

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[illegible]

Socratic method

AlphaGo Zero Nature AlphaGo Zero
superhuman performance

Jack **Ralph** **Ralph**

leader **Piggy** **Ralph**

Simon

The Development of Liberal Arts and Sciences

[34]
 1970

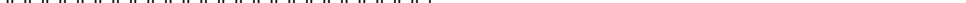
[35] <https://www.braintrust.org/> BRAIN Initiative <https://www.nasa.gov/mission/moonshot/> Moonshot

[illegible]

[illegible][illegible]

leucotomy leucotomy

[illegible]

[37] 

[illegible][illegible][illegible]

Technological Singularity

[38] Intel, “Intel® Core™ i7-10700K Processor,” 2020. <https://www.intel.com/content/www/us/en/products/sku/96066/intel-core-i7-10700k-processor-specifications.html>.
CPU OS, 2020. <https://www.intel.com/content/www/us/en/products/sku/96066/intel-core-i7-10700k-processor-specifications.html>.

CPU OS 1980

「技術的奇点」が来るのか？

「技術的奇点」が来るのか？ Intel の smartphone の CPU は、技術的奇点の到来を示している。 Technological Singularity とは、技術の進歩が指数関数的に加速し、人間の知能を超えるようになることを指す。これは、AI の発展や量子計算の進歩によって実現される可能性がある。

[39] smartphone の CPU は Intel から ARM に移行している。ARM は open source の CPU であり、OS も open source である。これは、技術的奇点の到来を示している。

Linux Torvalds は Linux の開発者であり、Google は Android の開発者である。Microsoft は Apple の smartphone の OS を開発している。Google は ARM の CPU を開発している。これは、技術的奇点の到来を示している。

smartphone の普及は、技術的奇点の到来を示している。

[40] program music は、技術的奇点の到来を示している。program music は、音楽のプログラムである。これは、技術的奇点の到来を示している。

「技術的奇点」が来るのか？

[41] 「技術的奇点」が来るのか？

[42] 2019 年「技術的奇点」が来るのか？
「技術的奇点」が来るのか？
<https://www.chinesepen.org/blog/archives/121899>

「技術的奇点」が来るのか？

The Selfish Gene は、技術的奇点の到来を示している。The Selfish Gene は、自己中心的な遺伝子の行動を説明する。これは、技術的奇点の到来を示している。

「技術的奇点」が来るのか？

「技術的奇点」が来るのか？

[43] "On 28 July, after reading Serbia's reply, Wilhelm commented, 'But that eliminates any reason for war' or 'every cause for war falls to the ground'.....Wilhelm's sudden change of mind about war enraged Bethmann Hollweg, the military, and the diplomatic service, who proceeded to sabotage Wilhelm's offer.", from https://en.wikipedia.org/wiki/July_Crisis.

Wilhelm 德國皇帝威廉二世在位期間，德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

Wilhelm 德國皇帝威廉二世在位期間，德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

[44] 德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

[45] 德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

[46] 德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

[47] 德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

[48] 德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

[49] 德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

德國在國際上聲望日隆，經濟實力大增，被譽為「歐洲之歐洲」。

public service

arXiv

Solyndra

[53] Leukotomy Moniz leukotomy
Leukotomy Leukotomy leukotomy
leukotomy Moniz leukotomy
<https://www.nobelprize.org/prizes/medicine/1949/moniz/article/>, First published 29 October 1998

Moniz leukotomy "for his discovery of the therapeutic value of leucotomy in certain psychoses." leukotomy leukotomy
<https://www.nobelprize.org/prizes/medicine/1949/moniz/biographical/>

leucotomy leucotomy leucotomy

leukotomy " "

[54] "Second US town pays up to ransomware hackers",
<https://www.bbc.com/news/technology-48770128>